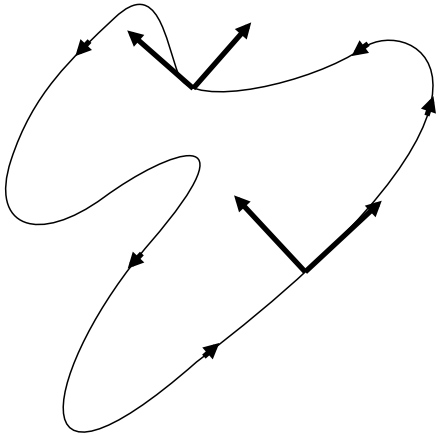
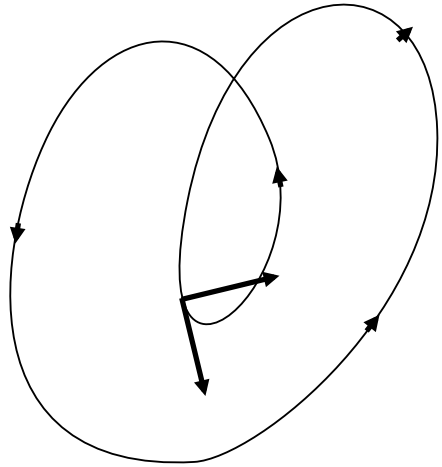
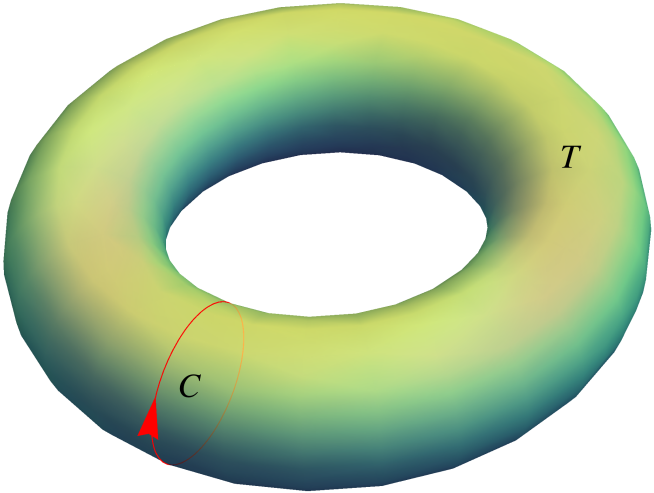


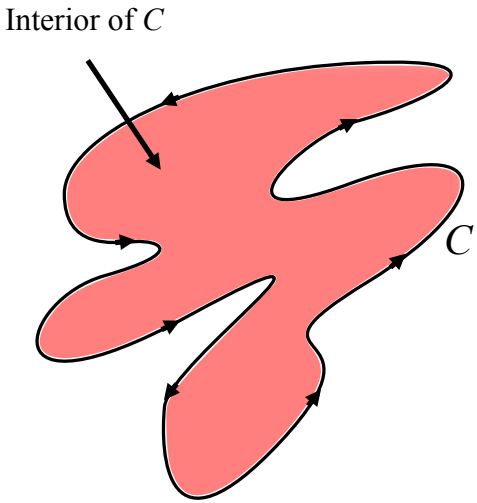
(a) A simple closed curve



(b) A (nonsimple) closed curve



(c) A simple closed curve C on a torus T; C bounds no region on T



(d) C is positively oriented